What is Claimed:

1. A surgical instrument comprising:
an instrument handle;
a tubular sleeve projecting from the instrument handle;
a plastic optic fiber extending through the handle and the sleeve to a distal end portion that projects from the sleeve, the distal end portion of the optic fiber having an adjustable bend therein.

2. The instrument of Claim 1, further comprising::
the distal end portion of the optic fiber is retractable into the sleeve.

3. The instrument of Claim 1, further comprising:
the sleeve projects straight from the handle and the distal end portion of the optic fiber bends relative to the sleeve as it projects from the sleeve.

4. The instrument of Claim 1, further comprising:
the sleeve is a rigid tube that projects from the handle and the distal end portion of the optic fiber has a preformed bend that is straightened when the distal end portion is retracted into the tube of the sleeve and bends when the distal end portion is extended from the tube of the sleeve.

5. The instrument of Claim 1, further comprising:
the handle has a mechanism that is connected to the sleeve and selectively moves the sleeve between pushed forward and pulled back positions of the sleeve relative to the handle.

6. The instrument of Claim 5, further comprising:
the optic fiber is held stationary relative to the handle and in the pushed forward position of the sleeve the distal end portion of the optic fiber is entirely contained in the sleeve and in the pulled back position of the sleeve the distal end portion of the optic fiber projects from the sleeve.

7. The instrument of Claim 1, further comprising:
a hollow interior bore extends through the optic fiber.

8. The instrument of Claim 1, further comprising:

the distal end portion of the optic fiber is formed of a thermoplastic and is pre-bent at an angle.

9. The instrument of Claim 1, further comprising:

the optic fiber is the only optic fiber that passes through the handle and the sleeve.

10. The instrument of Claim 1, further comprising:

the instrument is an illuminating probe.

11. The instrument of Claim 1, further comprising:

the plastic is polymethylmethacrylate.

12. The instrument of Claim 1, further comprising:

the tubular sleeve has an interior surface and there is an air gap between the sleeve interior surface and the optic fiber in the sleeve.

13. The instrument of Claim 1, further comprising:

the tubular sleeve has an interior surface and a layer of sliding material between the sleeve interior surface and the optic fiber in the sleeve.

14. The instrument of Claim 13, further comprising:

the layer of sliding material is located in only a portion of the sleeve creating an air gap between the sleeve interior surface and the optic fiber where the layer of sliding materiel is not located.

15. A surgical instrument comprising:

an instrument handle;

a tubular sleeve projecting from the handle;

a plastic optic fiber extending through the handle and the sleeve to a distal end portion of the fiber; and

a mechanism on the handle and connected to the sleeve to selectively move the sleeve between a pushed forward position of the sleeve where the sleeve projects a first distance from the handle and a pulled back position of the sleeve

where the sleeve projects a second distance from the handle that is less than the first distance.

16. The instrument of Claim 15, further comprising:
the optic fiber is secured stationary to the handle and a distal end portion of the optic fiber projects from the sleeve when the sleeve is moved to the pulled back position and the distal end portion of the optic fiber is entirely contained in the sleeve when the sleeve is moved to the pushed forward position.

17. The instrument of Claim 16, further comprising:
the distal end portion of the fiber has a bend formed therein.

18. The instrument of Claim 15, further comprising:
a hollow interior bore extends through the optic fiber.

19. The instrument of Claim 15, further comprising:
the distal end portion of the optic fiber is formed of a thermoplastic and is pre-bent at an angle.

20. The instrument of Claim 15, further comprising:
the sleeve is a rigid tube that projects from the handle and the distal end portion of the optic fiber has a preformed bend that is straightened when the distal end portion is retracted into the tube of the sleeve and bends when the distal end portion is extended from the tube of the sleeve.

21. The instrument of Claim 15, further comprising:
the sleeve projects straight from the handle and the distal end portion of the optic fiber bends relative to the sleeve as it projects from the sleeve.

22. The instrument of Claim 15, further comprising:
the optic fiber is the only optic fiber that passes through the handle and the sleeve.

23. The instrument of Claim 15, further comprising:
the plastic is polymethylmethacrylate.

24. The instrument of Claim 15, further comprising:

the tubular sleeve has an interior surface and there is an air gap between the sleeve interior surface and the optic fiber in the sleeve.

25. The instrument of Claim 15, further comprising:

the tubular sleeve has an interior surface and a layer of sliding material between the sleeve interior surface and the optic fiber in the sleeve.

26. The instrument of Claim 25, further comprising:

the layer of sliding material is located in only a portion of the sleeve creating an air gap between the sleeve interior surface and the optic fiber where the layer of sliding material is not located.